Biological
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Serials

The Maritime medical news

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THE
MARITIME MEDICAL NEWS
A MONTHLY JOURNAL DEVOTED TO MEDICINE & SURGERY

VOL. XVIII HALIFAX, NOVA SCOTIA, AUGUST, 1906. NO. 8

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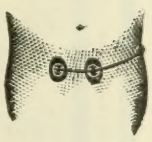

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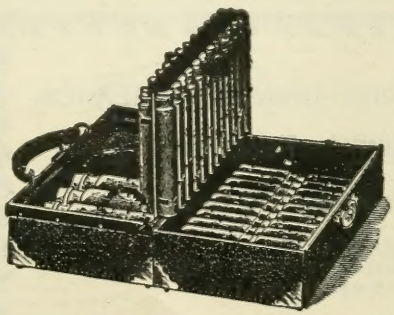

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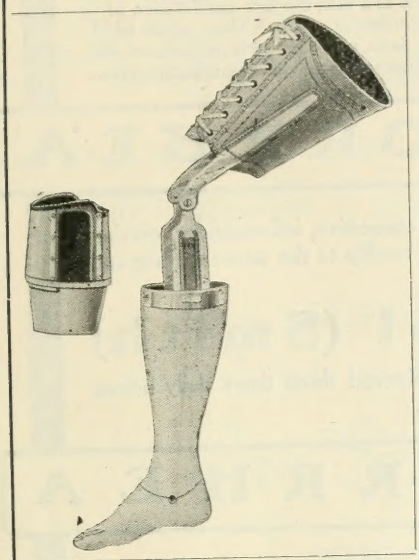

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THE
MARITIME MEDICAL NEWS
VOL. XVIII., *AUGUST, 1906*, No. 7.

Care of the Indigent Insane. The following is an editorial which appeared in the *New York Medical Journal*, of June 23rd:—

There are two propositions that medical men, if they think about the subject of insanity at all, must admit are fundamental: First, that the insane person is sick; and, second, that a sick person ought to be cared for by a physician. There is in Pennsylvania a tendency on the part of the State Board of Public Charities to return to the old method of county care of the insane poor, by which these unfortunates are kept in almshouses under the supervision of untrained wardens and supervisors. This reactionary policy is due to the overcrowded condition of the state hospitals for the insane, and the lack of appropriated funds for the extension of the accommodations for this class of patients. At the meeting of the Association of Trustees and Physicians of the State and Incorporated Hospitals of Pennsylvania, which was held in Philadelphia on May 17th, Dr. John B. Chapin read an excellent paper, in which he traced the history of the establishment and growth of the state hospitals for the insane and the present reactionary policy of the Board of Public Charities.

Dr. Chapin said that we had a right to urge, for instance: First, that the care of the insane should be distinct and separate from those in the county poorhouse who are not insane; second, that the insane should be regarded as subject to a condition of disease for which they ought to be placed under the care of physicians, and not so called wardens or keepers, who were too often selected and changed solely according to the dictates of political influence, and not for any special fitness; third, that it should be obligatory upon all judiciary or county officers having to do with the indigent insane, to commit every such insane person to a hospital, and that it should not be legal to transfer the actually insane or those who might probably recover to a county poorhouse under any circumstances. In justification of these principles he appealed confidently to the judgment of the medical profession of the State and to all benevolently disposed persons.

These three cardinal principles may be unhesitatingly subscribed to by the medical profession. We

hope to see the great State of Pennsylvania progress in its policy relating to its insane poor, rather than to witness a retreat from a position to which modern conditions and scientific observation have carried the therapeutics of mental disease.

Sale of Poisons by General Storekeepers.

The Nova Scotia Pharmaceutical Society has been instrumental in having the Attorney-General issue a circular letter to the general storekeepers of the Province, calling to their attention the clauses of the statute, "Of the Sale of Drugs and Medicines," which make it illegal for any except registered pharmacists and physicians to sell certain drugs enumerated in a schedule to the Act. The clauses governing the penalty for violation of the Act are included in the letter, and also a list of the drugs in the schedule.

There is reason to believe that the provisions of the Act are being violated, in some cases by people who are ignorant of the stringent regulations regarding the sale of poisons enumerated in the schedule. The greater part of these violations consist in the sale of tincture of iodine, carbolic acid, laudanum, quinine, and the lead and zinc salts.

In districts where there are no drug stores the right to sell poisonous drugs and medicines belongs to the doctors exclusively, and no one else has any right to sell them. The circular is being mailed as a warning to those who have, perhaps unwittingly, violated the law, or who might inadvertently do so, were they not cautioned.

In order that the sale of poisons by general storekeepers be stopped, it will be necessary to have the co-operation of members of the pharmaceutical and medical societies. This can be done by notifying the Secretary of the Pharmaceutical Society of any violations that come under observation.

The Opsonic Index.

It is now fully three years since Wright and Douglas first established the place of the opsonins in phagocytosis. In the meantime a number of contributions have been made to the literature treating of these interesting bodies, and sufficient has been demonstrated to warrant the assumption that the opsonic theory is one which has definite application to the practice of medicine, and which promises to add materially to our diagnostic and therapeutic armamentaria.

The researches of Wright and Douglas show that, when completely separated from the plasma (or serum), the leucocytes possess no phagocytic power, while in the presence of the serum, this property is easily demonstrable. In the attempt to discover the principle which controls this latter result, it was learned that the substance does not act upon the leucocyte

but rather upon the bacterium, preparing it, as it were, for phagocytosis. Thus we get the name "opsonin" (from *opsono*, I cater for, I prepare victuals for). It is thought that the opsonins are carried in the blood to a focus of infection where they unite chemically with the bacteria, which by the union are so altered that it is possible for the leucocytes to engulf and destroy them.

While our knowledge of the opsonins is yet far from perfect, it seems that they are quite distinct from the bacteriolysins, the antitoxins, and probably also from the agglutinins. They are destroyed (in normal serum) by ten minutes exposure to a temperature of 60° C., or by several hours exposure to sunlight. Apparently there is an opsonin specific for each variety of bacterium which may invade the tissues. In cases of mixed infection, the opsonins correspond in variety to the germs which are concerned in the process. Moreover the degree of phagocytosis which obtains in any infection bears a fairly constant relation to the quantity of opsonins present.

The specificity of opsonins and the constancy with which the extent of phagocytosis depends upon the quantity of opsonin in the blood are factors of much importance, and enable us to apply the opsonic theory in practice. It is found that, generally speaking, the opsonic index is lowered in infections when the resisting power is reduced, and that it rises with increasing resistance. A means of raising the opsonic index has been determined. Our knowledge of opsonins, limited though it be, is thus of assistance in diagnosis, prognosis and treatment.

The determination of the opsonic index, which necessitates the comparison of the phagocytic power of leucocytes when acted upon by the serum of a normal individual with that exhibited when the serum of the diseased person is used, is, as yet, a laboratory proceeding, and the technique, while not difficult, demands skill. We may reasonably hope, however, that it may be modified and simplified in a manner comparable to that which we have witnessed in the case of the Widal reaction, and thus be made available to every practitioner.

Taking, for illustration, a case of staphylococcus infection, the measurement of the opsonic index requires a drop or two of the blood from the infected person as well as a similar quantity from a healthy individual, an emulsion of staphylococci in salt solution, and a quantity of leucocytes washed free from their plasma. The serum is allowed to separate out from both the blood specimens. In one pipette is received equal quantities of the serum of normal blood, staphylococcus emulsion, and the leucocytes. In the other pipette some serum from the

infected person's blood is mixed in equal quantities with staphylococcus emulsion and the leucocytes. Both tubes are incubated for fifteen minutes, and from each films are prepared and stained. The slides are examined especially for the bacteria which have been engulfed by leucocytes. A fixed number of leucocytes is counted—fifty being a convenient number. If fifty leucocytes from the tube in which normal serum was used, show a hundred cocci within them, the phagocytic index for these blood cells is, of course, 2. If fifty leucocytes from the other tube show the inclusion of but fifty cocci, the phagocytic index in this case is 1. (The first of these indices is taken as normal.)

It follows that a comparison of the two indices is a comparison of the quantity of opsonins present in the blood of a healthy and of a diseased person. In the case we have supposed, the phagocytic index of the abnormal serum being but half that of the normal serum, the opsonic index would be 0.5.

We have space for but a reference to the results of investigation of this interesting phenomenon. Two generalizations, however, must have mention. In localized infections, the opsonic index (as regards the bacterium involved) is below the normal. In infections not strictly localized, as in cases of acute pulmonary tuberculosis, the opsonic index has a tendency to fluctuate, being sometimes above, sometimes below unity.

The specificity of the opsonic reaction makes it of great assistance in diagnosis. In obscure cases, a lowered opsonic index to any particular bacterium almost certainly indicates infection by that bacterium.

The applicability of the opsonic theory to therapy depends upon the principle that the antibacterial substances of the blood are increased by inoculating a patient with dead cultures of the organism causing the disease. But it has been proved that, to get proper results, the quantity and frequency of such inoculations must be regulated by the reaction produced, which can only be determined by watching the opsonic index. Definite harm may be done by over-dosage, or by too speedy repetition of a dose. Regulation of the tuberculin treatment, as indicated by the opsonic index, is giving excellent results in some of the sanatoria, and the rationale of vaccine treatment generally is much more satisfactory by reason of the recent work on the opsonins.

It would be difficult to overestimate the importance of these observations. Further researches may perhaps lead to modification of our present interpretation of the part of the opsonins, but there is much reason to believe that a very distinct advance has been made; and that in future much of our diagnosis and treatment will be suggested by the results secured when estimating the opsonic index.

THE COMMON HOUSE FLY AS THE CAUSE OF DISEASE.

By LIEUT.-COLONEL JONES, *P. A. M. C., P. M. O.,*

Honorary Surgeon to the Governor General.

Professor of Public Health, Halifax Medical College.

IT is the primary object of all sanitarians to endeavor to find the cause of what are so rightly called the preventable diseases. While success has in many instances crowned research both theoretical and practical, still we must acknowledge that even now our knowledge of the method of propagation of a large number of this group of diseases is extremely limited. This is especially the case in the exanthemata. No satisfactory bacteriological cause has yet been given for such important diseases as small-pox, scarlet fever, measles and others of that group. Many claims have been made, but none have stood the test. We accept the statement that they are micro-organic in origin, but what the microrganism is has not been satisfactorily demonstrated to us by our learned friends the bacteriologists. It is not, however, from the bacteriological point of view that I wish to consider infection this evening, but rather the means by which the infective material, whatever it is, may be carried. An extremely interesting article was published in a recent number of the *New York Medical Record* on clean air in contrast to dust-laden air. The writer, Dr. Mitchell Prudden, draws attention to the danger from dust as a carrier of specific poisons; he found in the air of dwellings, public conveyances, churches, hospitals, many such germs—tubercle bacillus, pneumococcus, streptococcus, diphtheria, anthrax and tetanus bacilli. It has been shown that the air in the immediate vicinity of a person soon becomes infected with the microrganisms discharged from that person—in the act of coughing, sneezing, or even in ordinary speaking; and the dust so infected has a tendency to settle on any part of the room, or on any object in the room—perhaps to be stirred up again by currents and drafts, or by the so-called domestic sweeping and dusting. At certain times of the year there are certain insects constantly moving to and fro on these dust laden surfaces. The most common of these insects is the ordinary house fly.

The study of insects as the carriers of disease is one of the most interesting subjects in the preventive medicine of the present day. Yellow fever and malaria are the two most prominent of these diseases. The work in solving the mystery of yellow

fever has been a great triumph of medicine. It is twenty years ago since Dr. *Carlos* Finlay first called attention to the mosquito as the cause of yellow fever, but only recently has it been generally accepted. The recent outbreak of this disease in New Orleans has demonstrated, not only to the profession, but to the laity that yellow fever is not to be so dreaded and that epidemics, so-called, can be controlled and stopped with the death and destruction of the special variety of mosquito instrumental in its spread. The same applies to malaria, and also to another disease, the sleeping disease of Uganda. The practical results of these researches have shown that it does not do to sit down and not try and find a cause of so-called infectious diseases. The gain in the yellow fever credit account has been enormous. Trade and commerce, not to mention human life, have been preserved. The antiquated ideas as to quarantine have been, or will be, done away with, and the public confidence in medical science and its power to prevent disease has been much increased.

Whilst on service in South Africa one came in contact with a very large proportion of cases of enteric fever, and I was forcibly impressed with the impossibility of all cases of this disease being due to infected water. I do not mean for an instant to say that typhoid is not a water borne disease; practical evidence is too strong upon that point. But it seemed to me impossible that all water in South Africa could be typhoidally infected, and yet typhoid cases occurred at all times and in all localities. But we had with us constantly as a scourge "a plague of flies," though I believe that the plague of flies mentioned in the Scriptures has been satisfactorily proved to have been composed of mosquitoes. In South Africa the flies were everywhere, crawling over the food, over the faces of the enteric cases, over the discharges, and especially over the latrines and refuse heaps. Now this condition, though less exaggerated, exists in nearly all communities in warm weather. What is this common house fly? Is there anything in its life's history which would lead us to suppose that it could convey disease? And is there any evidence that it does actually convey the infective material from some person or place to a receptive individual?

It is one of the most widely distributed of all insects; it has been known and described from early history. Its name is the *musca domestica*, which name shows that mankind has put up with it, and has regarded it as a necessary and unavoidable evil, like many other domestic things. The Mic-Mac Indians ascribe its origin to the dust of the bones of a wicked giant that once lived. As regards its anatomy, it has one thing in its

favour, it has no sharp proboscis like the mosquito, but has a short fleshy bilobed tongue which, though incapable of penetrating the skin, is provided with a terminal framework of tracheal tubes acting like a rasp and capable of causing considerable annoyance as some of the members may know. It is an interesting fact in medical history to know that Linnaeus was the first to describe the fly and to give it its name.

The eggs, about 120 in number, are laid in any organic material, especially if it be putrid; notably in horse manure about a stable or about latrines, as was plainly demonstrated in the Cuban war, where the larvae were seen in myriads about the poorly policed latrines. The larvae are hatched in twenty-four hours, and pass through three stages averaging from five to seven days, in all about twelve days, when we have the fully developed fly. It is, therefore, apparent that not only is the fly hatched in filth, but it must return to filth to lay its eggs. It fulfils its use as a scavenger both in the pupal stage and when fully grown—but this use does not give an excuse for its existence. Is there any evidence to show that specific disease can be, or has been transmitted by flies? There are the following diseases—typhoid, cholera and plague, and tuberculosis in which there is evidence. In the Cuban war in the military camps where lime had been spread on latrines flies with their feet whitened by lime were seen walking over the food.

Numerous observers, more particularly Vaughan, have demonstrated the specific bacillus in the excrement of flies made to feed on infected material, and colonies of typhoid bacilli have been shown to develop in the tracks of flies which have been allowed to settle on typhoid discharges, and made to walk over a suitable, solid, culture medium.

From the statistics of both the Cuban and the South African wars, it is shown that typhoid fever was more common amongst the mounted than amongst the unmounted troops. The statistics of the Japanese war, as to enteric, are not yet available—but when they are we must take into consideration the fact that Manchuria is not an enteric country, and I rather think the Russians will show as good results as the somewhat sanitary overrated Japanese.

An epidemic of typhoid fever in Chicago in 1902 was most severe in one ward of that city. In this ward, containing one thirty-sixth of the population of the city, there occurred over one-seventh of the deaths from this disease. The epidemic could not be attributed to the water supply. An examination of the sewerage showed that many of the sewers were too small to carry the sewerage. Only 48% of the houses had sanitary plumbing, 7% had

defective, 22% had water closets with intermittent water supply, 11% had privies with no sewer connection. Flies caught in two undrained privies, on the fence of two yards, on the walls of two houses and in a room of a typhoid patient, were inoculated into 18 tubes, and from five of these tubes the typhoid bacillus was isolated. It is evident that this epidemic was brought about by the dissemination of the infectious material by flies. Fischer in *Archiv. Hyg.* says that flies bred on typhoid cultures give off the bacillus twenty-five days after infection.

CHOLERA: Indian medical officers regard flies fed on cholera discharges as one of the most common agencies by which the spread of this disease is brought about. Two epidemics show this: one at Bardwan prison, where the flies were carried over the prison wall by a high wind from the direction of some native house where the disease existed; and another at Gayas jail, where the milk was infected by flies, and McRae says, "that flies should be looked on in the light of poisonous agencies of the worst kind."

TUBERCLE: The flies may carry the tubercle bacillus within their bodies when they are permitted to feed on tubercular sputum. Live tubercle bacilli have been obtained from the excrement of flies fed on tubercular sputum.

It has also been shown that the fly plays a part in the infection of plague—though the common flea plays here a larger part. If then it is known that the fly is a conveyor of disease in these cases, is it not reasonable to suppose that in other conditions it may also be the cause? The fly may come into contact with the patient in such diseases as scarlet fever, measles, small-pox or diphtheria, and as three of these rapidly become septic diseases, is there not an excellent breeding ground for the fly in the discharges of the patient, more particularly from the mouth, which if care be not taken may be allowed to remain in certain parts of the room? Or perhaps the fly may come into contact with infected dust in some locality other than the immediate neighborhood of the patient and carry the contagion to a suitable cultivation soil in some individual. I think this is reasonable.

Is there any practical outcome of all these suppositions? I think there is. Yellow fever has been stamped out by preventing the access of mosquitoes to any patient by a careful system of screening, as well as by the destruction of the mosquito and its breeding places. I think the same thing might be done in all infectious diseases in the summer time; the careful screening of patients and the destruction of all flies in the sick room, and always at all times as far as practicable the destruction of their breeding places. It enforces the great fundamental principle of sanitary science as laid down from all time, which is simply the art of being clean.

References: Military Hygiene, Munson; Principles of Hygiene, Bergey; Health of Armies, Caldwell.

PRESIDENTIAL ADDRESS.

By F. S. L. FORD, M. D.,

New Germany.

President of the Lunenburg-Queens Medical Society.

(Delivered at Public Meeting, Medical Society of Nova Scotia, Lunenburg, July 3, 1906.)

IT is a matter of great gratification to the medical profession of this county, the President of whose society I, for the time being, happen to be, that the Nova Scotia Medical Society has chosen Lunenburg as its place of meeting for 1906. And indeed, I may say that this feeling of pleasure is not confined to the profession alone, for on all sides and from all classes I have heard expressions of satisfaction that this assembly of medical men had come to visit us. The profession here feels highly honoured in being permitted to entertain their friends and colleagues from the other counties, while the people of this county are always pleased to extend their hospitality to visitors, and proud to show to strangers the material resources and native beauties of this fair portion of our common land. The town has spoken its welcome to you in no uncertain sound and has extended cordial greetings, which as a citizen of the county I heartily endorse; but it is as spokesman of the Lunenburg-Queens Medical Society that it is my duty and great pleasure to welcome you to this historic town. To our guests I say, "I shower a welcome on you, welcome all."

Lunenburg is one of the oldest towns in Nova Scotia. On the seventh of June, 1753, four years after Halifax was founded, a little fleet of ships came sailing up this harbour, bringing to the shore about 1500 people, mostly Germans. The expedition was under the command of two of General Wolfe's captains—Rous and Cobb. Captain Rous' name is perpetuated in the name of the brook where the first landing was made, which point of interest is within easy walk of where we now are.

Captain Cobb afterwards went to Liverpool, built a house from timber brought from Boston, which house is in a good state of repair. My own birth-place is within two miles of this historic house.

This was the beginning of Lunenburg, and that to these early settlers the lines had not fallen in pleasant places, is evidenced by the fact that during the first year no less than twelve block houses were built as a protection against the Indians.

It is not my purpose, at this time, to go into a historical detail, but I can assure anyone who has a taste for that sort of thing, that he will find few richer fields in which to dig than that furnished by the history of Lunenburg and its

sister towns—charming Chester, with its Oak Island and buried treasure; beautiful Bridgewater, with its enchanting LaHave; and "Sweet Belle Mahone," always delightful, but more particularly so at this time of the year.

A mention of some of the earlier practitioners of medicine in Lunenburg County may not be out of place.

Cochrane, in his history of Lunenburg, says: "The first medical man of any note to come to Lunenburg County was Dr. John Boleman, who came from Germany early in the American Revolutionary war with the Hessian contingent. He was attached as surgeon to the army of General Burgoyne. The Hessians at the close of the war were disbanded at Halifax, and Dr. Boleman subsequently settled in Lunenburg, attracted, no doubt, by the fact that there his native language was spoken by so many of the inhabitants. He practised his profession in Lunenburg, and having the field almost to himself, he soon amassed considerable property, and became one of the leading men of the community, as appears from his being chosen to represent the county in the House of Assembly. He died about 1826, having practised his profession for over 40 years in Lunenburg. He encountered great fatigue, hardship and danger from the almost entire lack of roads, the necessity of boating, the crossing of ice, the poor accommodation in country houses and from many other inconveniences unknown to the two score practitioners now occupying what was then his sole dominion. His son, Dr. Edward Boleman, also practised for many years in Lunenburg. A daughter married Lieutenant Aiken, R. N., and their son, C. Cheyne Aiken studied medicine, settled in Lunenburg and enjoyed a large practice for many years. Another physician to whom the older people often refer was Dr. Joseph Steverman, whose residence was somewhat out of town. His practice must have extended also over a very large field."

Another medical man who practised for many years in the county was the late Dr. Charles Grey, of Mahone Bay, to whom also the older people, particularly in the northern and eastern parts of the county, refer with respect and affection. Many other names of members of the profession who have served their day and generation, and gone to their reward, could be mentioned, but time does not permit. These men and their colleagues and successors worked faithfully and well, and discharged the duties of their high calling with greater or less success. They laboured under many disadvantages, not the least of which was entire absence of organization. As far as can be learned, for over a hundred years no attempt at organizing a medical society was

ever made. The evil effect of this lack of co-operation was apparent in many ways, one of the most undesirable results being the fostering of a spirit of antagonism between members of the profession, and the stirring up of jealousies between rival practitioners. In a community made up of a people who, before the days of free schools, were largely uneducated, and to a high degree superstitious, it was no easy matter for medical men to keep their patients within due bounds as regards their relations to their physicians; nor does it seem that toward one another the members of the profession always observed the principles underlying medical ethics. The mantle of brotherly charity was rarely extended to cover the failings of a fellow practitioner. I am afraid, indeed, that every tub was not allowed to stand quietly upon its own bottom, but many times suffered jolts at the hands of its associates that threatened its equilibrium.

With the advent of the schoolhouse all over the country, the witches grew fewer and the exorcists and "charmers" gradually disappeared. A higher grade of intelligence among the people made the work of the educated physician somewhat less discouraging, while the tolerant spirit of the latter part of the last century tended to promote harmony among the members of the medical profession, as it has among the religious bodies. Still, much remained to be desired, and when in 19— the Lunenburg-Queens Medical Society was formed, an important step was taken which marked an epoch in the medical history of this county. I say *this* county, because, up to the present, the physicians of Queens County, with one or two exceptions, have kept aloof from the society. It is a matter of regret to us all that this is so, and I can assure the medical men of Queens that they are losing much by not taking advantage of the benefits arising from membership in a local society. With railway communication and excellent train service, they must be cogent reasons indeed that can be advanced to show why they do not come in with us. Of late some suggestion has been made of dropping the name Queens from the society title. There seems to be a slight feeling here, that "Ephraim is joined to his idols; let him alone." It is to be hoped, however, that, now that the transportation difficulty has been overcome, our brethren in Queens will either form a society of their own, or make the name "Lunenburg-Queens" no longer a misnomer.

In speaking of the formation of a medical society, it may not be out of place to see what the master-mind in medicine of the present day has to say upon the subject. "The first, and in some respects the most important, function of the medical society is to

lay a foundation for that unity and friendship which is essential to the dignity and usefulness of the profession."

Unity and Friendship, how we all long for them, but how difficult to attain! Strife seems rather to be the very life of the practitioner, whose warfare is incessant against disease, and against ignorance and prejudice; and, sad to have to admit, he too often lets his angry passions rise against his professional brother. The quarrels of doctors make a pretty chapter in the history of medicine. Each generation seems to have had its own. The Arabians and the Galenists, the humoralists and the solidists, the homœopaths and the regulars, have in different centuries rent the robe of Æsculapius. But these larger quarrels are becoming less and less intense, and in the last century no new one of moment sprang up; while it is easy to predict that in the present century, when science has fully leavened the dough of homœopathy, the great breach of our day will be healed. But in too many towns and smaller communities miserable factions prevail, and bickerings and jealousies mar the dignity and usefulness of the profession. "So far as my observation goes," says Dr. Osler, "the fault lies with the older men. The young fellow, if handled aright, and made to feel that he is welcomed and not regarded as an intruder to be shunned, is only too ready to hold out the hand of fellowship. The society comes in here as a professional cement. The meetings in a friendly social way lead to a free and open discussion of differences, in a spirit that refuses to recognize differences of opinion on the non-essentials of life as a cause of personal animosity or ill-feeling. An attitude of mind habitually friendly, more particularly to the young man, even though you feel him to be the David to whom your kingdom may fall; a little of the old fashioned courtesy which makes a man shrink from wounding the feelings of a brother practitioner—in honour preferring one another; with such a spirit abroad in the society and among its older men, there is no room for envy, hatred, malice, or any uncharitableness It is the confounded tales of patients that so often set us by the ears; but if a man makes it a rule never, under any circumstance, to believe a story told by a patient to the detriment of a fellow practitioner—even if he knows it to be true!—though the measure he metes may not be measured to him again, he will have the satisfaction of knowing that he has closed the ears of his soul to ninety-nine lies, and to have missed the hundredth truth will not hurt him. Most of the quarrels of doctors are about non-essential, miserable trifles and annoyances—the pin pricks of practice—which would sometimes try the patience of Job, but the good fellowship and friendly inter-

course of the medical society should reduce these to a minimum."

The work done by this little society need not at this time be enlarged upon. Its labors in several spheres of usefulness have not been altogether in vain. To the insurance companies it has been the "cloud no bigger than a man's hand"; to the general public it has been a benefit in giving them the service of physicians with ever increasing sense of duty and higher ideals; and with the individual members it has changed to a great extent the regard in which they hold one another, and always for the better. Not one of us can attend the meetings of this society and not be helped. We come away with better thoughts, better intentions, a better opinion of our fellows and of the work we have to do. We see points of excellence in our colleagues which would never otherwise have been discovered. The society makes of us the very best kind of an executive committee to carry into effect the recommendations and regulations of the Provincial Society. I cannot, therefore, impress too strongly upon you the importance of the County Medical Society.

The work of organization is not without its difficulties and, even when fully under way, the task of making it a living influence in your midst, may not be always easy. Some men will stay away from the meetings because they think they have not time to attend. This may be true at times, but surely no man is so busy that he cannot find time to attend at least one meeting a year, and thus show, if only by his presence, that he is in sympathy with the society. Moreover, it is often observed that the busiest men are the most regular attendants. Some may entertain doubts as to the society's usefulness. These misgivings will disappear after attending a meeting or two. Some again may feel that the society is "run" by a clique. To these latter I may say that if they attend the meetings and show a desire to take upon themselves some of the responsibilities of office, they will not be long in finding their share of the work waiting for them. Let me say then to the practitioners from counties where no local society exists, that, in spite of all difficulties, your first move in the future should be toward the establishing of a home society, and I can assure you that your efforts, if successful, will never be regretted. It will mean for you work, but all good things ever achieved by man or woman are the result of unremitting work. Only through the dust and stress of conflict is the palm of victory won. Only those whom nervous or physical prostration has deprived of this joy, can realize the joy of work. To the tired man or woman the goal which looms up in the far future, and which

they hope some day to attain, is a sort of oasis where they may enjoy mental and physical rest. But once attained, this dream of rest brings little happiness. The joy of life is action and conquest over difficulty. It consist in mastery over self, in helpful service to others, in moral, mental and material achievement, in building up those graces of character which will live when meaner things have passed away.

Do not, then, let the prospect of increased responsibilities deter you from setting about organizing your County Society. The work is worth doing for your own sakes, and for those who are to come after you. Do this thing, and your successors will rise up and call you blessed. Your contemporaries will recognize your worth, as does the profession in this county the services of those who founded this society. Some of these men are present this evening. May they long continue with us to counsel and direct. May this society never become a disappointment, but grow to vigorous maturity, a strength and blessing to us all.

DISLOCATION OF THE LEFT RING FINGER AT SECOND PHALANGEAL JOINT.

(Dr. W. D. Finn, Halifax, reports the following rare case.)

On Dec. 12th a lady whilst alighting from a trolly car lost her balance and fell to the ground. In falling her left hand went under her with the fingers extended. On arising she found her ring finger "twisted."

On examination I found a dislocation at the second phalangeal joint of the ring finger—the second phalanx dislocation backward and slightly rotated to the left.

Reduced the dislocation in the ordinary way.

A CASE OF CHYLOTHORAX.

By the Late D. G. J. CAMPBELL, M. D.

Halifax, N. S.

(Read before Canadian Medical Association, August, 1905.)

THE first case that I will bring to your notice is that of Mrs. A. H. Age, 45. Married. There is nothing of importance in the history of the patient previous to two years ago. She first came under observation in October 1903, with a history of having ten months before noticed a swelling on the left side of the neck, followed shortly after by a swelling in the same side of the abdomen. Examination revealed a fairly typical picture of Hodgkin's disease, with rather more enlargement of the spleen than usual. She was placed on arsenical treatment and for some time seemed to improve. She discontinued treatment after a few months and nothing was heard of her until September, 1904, when she came to the Victoria General Hospital complaining of great difficulty in breathing. On examination it was found that the anterior and posterior cervical glands on both sides were markedly enlarged; one of the posterior glands being as large as a hen's egg. The axillary glands on both sides were also enlarged. All the enlarged glands were hard and freely moveable. Pain and tenderness were absent. The spleen was very much enlarged and could be seen extending down almost to the level of the umbilicus. There was evidence of fluid in both pleural cavities; on the right side extending as high as the third interspace, and on the left side a little higher. Temperature 98°, pulse 100. The urine was negative.

Blood Examination—Red cells, 3,480,000. Leucocytes, 11,000. Hg. 70%. *Differential count*—Small mononuclear 52%, large mononuclear 10%, polynuclear neutrophiles, 35.2%, eosinophiles, 2.3%, mast cells, 0.5%.

It was decided to aspirate the left side, and as a preliminary precaution a hypodermic needle was introduced in the sixth interspace and a few cubic centimetres of a milky looking fluid was withdrawn. The aspiration was then proceeded with, and 1000 cc. of the same milky looking fluid was removed. Following the withdrawal of the fluid the patient had a severe coughing spell and expectorated about 25 cc. of fluid similar to that removed from the chest. Fortunately no other serious symptom developed and the patient was soon quite comfortable. On the following day, however, it was found that the chest had filled up and the dyspnœa had returned. The patient was so weak that it was decided not to

aspirate again at this time. Her condition remained unchanged for two weeks, when the right side was tapped and 1350 cc. of the same milky fluid withdrawn. This tapping gave very little relief and her condition became gradually worse and she died on October 6, four weeks after admission. Unfortunately no autopsy could be obtained.

EXAMINATION OF FLUID.—The fluid resembled thin milk very closely and on standing there was little or no tendency to separate into layers. Cultures all proved negative and cover slip preparations failed to reveal the presence of tubercle bacilli. Microscopically fat globules in a state of extremely fine division could be made out. The fatty character of the globules was demonstrated by shaking with ether when the fluid cleared to a great extent. On examining a drop of the ethereal extract after evaporation the fat was seen in the form of larger globules. A very few cellular elements were seen which proved to be all lymphocytes. Specific gravity 1020. Reactionalkaline.

CHEMICAL ANALYSIS.—

Water	90.84%
Solids	9.152%
Mineral Solids	8.39%
Organic Solids	0.762%
Coagulable Albumins	4.8%
Fats	3.0%
Sugar	0.59%

In the literature dealing with the subject under discussion, a division is generally made between chylous and chyliform exudates. Whereas the first are regarded as composed of true chyle, the milky appearance of the second is supposedly referable to fatty degeneration of cellular elements and notably met with in certain cases of carcinoma of the pleura and tuberculous pleurisy: more rarely in non-tuberculous pleurisy and possibly in association with abscess of the lung. One case is further reported in which the chyliform exudate was thought to be due to the presence of an excessive amount of fat in the blood. Shaw, in a recent analysis of the recorded cases, mentions thirteen as referable to the causes just mentioned besides referring to ten additional cases of doubtful origin.

Much has been said concerning the chemical differences which exist between chylous and chyliform exudates, but from an analysis of the recorded cases it seems rather difficult to draw any hard and fast line of division. One can accordingly understand how Shaw could be led to the statement that the diagnosis of a chylous exudate was only justifiable if occlusion or rupture of the thoracic duct could be definitely established. Upon this basis, of course, it would be impossible for me to establish either the chylous or the chyliform nature of the exudate in the present instance, but in view of the absence of polynuclear leucocytes, an inflammatory origin of the exudate can undoubtedly be

excluded. Moreover, there was nothing to lead one to think that a carcinomatous process co-existed with the manifest pseudoleukæmia. The cellular elements were so scarce that a cellular origin of the fat seems altogether inconceivable. The few lymphocytes which could be demonstrated, stained deeply with basic dyes and showed no evidence whatever of fatty degeneration.

Under the circumstances it would appear rather far fetched to refer the high percentage of fat in my case to degenerated cells; the disintegration having proceeded so far as to leave no remnants whatever. I accordingly feel justified in viewing the fluid as pure chyle, referable, no doubt, to occlusion or rupture of the thoracic duct in consequence of the pressure of enlarged glands in the posterior mediastinal space.

These cases of chylothorax are rare. Up to the time of Shaw's paper in 1900 only thirty-one had been recorded and since then I have found reports of only two additional ones. Adding these with Shaw's own case and including the present one we have thirty-five cases to date. These in general terms, were referable to traumatism and to occlusion or rupture of the thoracic duct, owing to carcinoma, enlargement of the lymph glands and to parasites. So far as non-carcinomatous disease of the lymph glands is concerned there are at least four cases including my own. Possibly there may be still others, but from the indefinite diagnosis in some cases no satisfactory conclusions can be drawn. Two of the four cases were recorded as malignant lymphoma. Shaw's case was diagnosed as lymph adenoma, while in my case the diagnosis of pseudo-leukæmia was made. In Shaw's case the leucocytes numbered only 5650 ; the patient had lumps about the jaw, in the axillæ and in the groins; most of the accessible lymph glands indeed were found to be enlarged. The account of the autopsy findings is exceedingly meagre and unsatisfactory, but I have no doubt that this case also was a true Hodgkin's. Thus far I have not been able to trace the cases of malignant lymphoma, but the nomenclature suggests that they too, may have been cases of pseudo-leukæmia.

Shaw. *Journal* of *Pathology and Bacteriology* Vol. 6, 1900, pg. 339.

Klebs. *Hanbuch der Path. Anat.* Bd. 1, S. 322. The author was able to produce chyliform fluid by mixture of ordinary serous effusion with epithelial or neoplastic cells which had undergone fatty degeneration.

Schmidt Mulhum tied duct, got milky fluid, but no rupture proved by injection of Berlin Blue. *Archiv f. Physiol., Leipsig* 1871, S. 553.

Borgehold tied duct, tore hole in pleural cavity and in duct, but found no fluid in pleural cavity; hole contracted. *Archiv. f. Klin Chir.*, Berlin 1883. Bd. XXIX, S. 463.

FURTHER REPORT ON A CASE OF MYELOGENOUS LEUKÆMIA.

By the late D. G. J. CAMPBELL, M. D.,
Halifax, N. S.

(Read before Canadian Medical Association, Halifax, N. S.)

THE second case which I will bring to your notice presents some points of interest. Eighteen months ago I presented this patient at a meeting of the society of the Johns Hopkins medical Hospital, but in view of the rarity of these cases, and on account of the interesting course of the disease subsequent to that time, I feel that no apology is necessary for this further report.

The history of the case is as follows: Mrs. M. S., aged thirty-five years. The patient's family history contains nothing of interest. As a child, she had mumps, diphtheria, whooping-cough and malaria; at eighteen, measles, and at twenty-one, pneumonia. Menstruation began at thirteen. She was married twice, the first time at fifteen. From the first marriage she had two children and one miscarriage; from the second, two miscarriages. Her general health had been good until 1899. Following a great deal of worry she then lost her appetite and slept badly, but definite symptoms of actual sickness did not appear until two years later, in 1901. She then noticed a bulging from below the ribs on the left side, which gradually increased and extended to the eft groin. Coincidentally her dyspeptic symptoms became more troublesome, she suffered from palpitation of the heart on the slightest exertion, from headaches, and also experienced pain below the ribs on the left side, between the shoulder-blades and in the legs, which were sufficientlly intense to interfere with her sleep. She gradually grew weaker and lost flesh.

The splenic tumor was discovered by a physician in March, 1903, and she was sent to a hospital, where the diagnosis of splenomyelogenous leukæmia was made. Her red cells then numbered 1,700,000 and the leucocytes 350,000. She first came under our observation in April, 1903. At this time she had lost twenty-seven pounds in weight; she complained of numbness in her toes and fingers and had difficulty in fastening her clothes. She looked moderately anæmic. The spleen extended almost to the umbilicus and well below the costal border in the nipple line. The liver was not palpable. There was no enlargement of the superficial lymph glands. At the apex there was a soft blowing systolic murmur scarcely audible at the base and not transmitted to the axilla; the area of cardiac dullness was not increased.

A blood examination at this time showed 54% of hæmoglobin, 1,760,000 red cells and 4,000 leucocytes.

Of these 21.7% were small mononuclears; 2.7% large mononuclears; 51.6 polynuclear neutrophiles; 6.7 polynuclear eosinophiles; 10.8 mast cells; 5.9 neutrophilic myelocytes and 0.2 eosinophilic myelocytes. She was given arsenic in increasing doses and a noteworthy feature was the tolerance exhibited towards the drug. Within two weeks she was taking twenty-six drops of Fowler's solution three times a day, and with brief intermissions has done so ever since. To sum up the progress of the case up to the time of the first report in February, 1904:

We have a patient in whom three years ago undoubted symptoms of myelogenous leukæmia developed. When the patient entered the hospital one year ago her spleen was greatly enlarged and the blood was absolutely characteristic of the disease, the leucocytes numbering 350,000. One month later they had fallen to 4,000; the myelocytes had diminished to 6.1% and there was nothing in the blood picture, with the exception of the high percentage of mast cells (10.8), to suggest a leukæmia. The spleen, however, was still enlarged. Six weeks later this symptom also had nearly disappeared and ever since the spleen has been scarcely palpable. The patient's weight has increased; her hæmoglobin has risen to over 75% and the red cells have increased correspondingly; the number of leucocytes has been normal and even subnormal; and at no time since April 28, 1903, has the percentage of myelocytes been above 2.4; on January 26, indeed, not one myelocyte was seen in a count of 1,000 cells. Significant, however, is the fact that the mast cells have been constantly much above the maximum normal; they varied between 3.5 and 10.8 per cent. As is well known, Ehrlich has laid great stress upon this factor in the diagnosis of myelogenous leukæmia, and there is indeed no other condition known in which a similar increase has been observed.

This then was the condition of the patient in February, 1904, and a better idea of the marked improvement will be perhaps obtained from the statement that in January, 1904, she was examined for life insurance and accepted by a reputable company.

The next note is on April 22, 1904: Hæmoglobin, 65%; red cells, 3,400,000; leucocytes, 3256; small mononuclear, 25.7%; large mononuclear, 1.7%; polynuclear neutrophiles, 42.5%; eosinophiles, 9%; mast cells, 9%. The spleen can barely be felt on deep inspiration.

October 24, 1904: Patient has been feeling well all summer, but has been taking her arsenic regularly. Hæmoglobin, 65%; red cells, 3,890,000; leucocytes, 12,480; small mononuclears, 15.5%; large mononuclears, 10%; polynuclear neutrophiles, 59.7%; eosinophiles, 2.6%; mast cells, 5.7%;

neutrophilic myelocytes, 6.3%. Spleen palpable. Shortly before this the patient had an attack of diarrhœa which lasted for a week, but following the attack she felt quite well.

Her condition continues good up to the time of the last note, which was made in April of this year. Red cells then numbered 3,360,000; leucocytes, 2600; hæmoglobin, 70%; small mononuclears, 25.7%; large mononuclears, 1.7%; polynuclear neutrophiles, 51.7%; eosinophiles, 7%; mast cells, 11%. The spleen was not palpable.

Thus we see that within the last year the patient has about held her own, with the exception of four to six weeks, during which time the leucocytes rose to 25,000 and the myelocytes reappeared, and on one occasion reached 16%. The spleen during this time was distinctly enlarged, more so than at any time while under observation except at the beginning. This condition has again disappeared and there are no myelocytes present in the blood. The leucocytes are present in normal numbers. The mast cells are still increased.

This patient has gone on now for over two years, and, barring the one occasion on which the myelocytes went above 5%, there would have been very little outside the increase of the mast cells on which to base a diagnosis of leukæmia without a knowledge of the past history.

Cases of this kind are manifestly rare, and I have been able to find reference to only seven cases in the literature.

McRae records a case of myelogenous leukæmia in whom twice within less than twelve months the classical features of the disease, viz., splenomegaly and myelæmia, could be demonstrated and then disappeared. At neither intermission was there any evidence of an intercurrent disease to account for the improvement. The subsequent history of this case is, unfortunately, not known beyond the fact that he died suddenly several months later in California, from what his physicians regarded as cerebral hemorrhage.

Senn, in 1903, reported a case of myelogenous leukæmia which he had treated with the X-ray and regarded as cured. In this case, however, the condition recurred and the patient died within a few months.

Plehn, in 1904, reported a case of mixed cell leukæmia which came under his observation. This case was treated with arsenic hypodermically, and improved very much although strictly normal relations were not established. Plehn himself does not regard this case as cured, nor does he refer the manifest improvement to the use of arsenic, but is rather inclined to attribute it to the resorption of a retro-peritoneal hæmatoma of splenic origin which was present and disappeared.

In the discussion which followed Plehn's report in the *Berliner Medizinische Gesellschaft*, Kohn mentions a case in which an apparent cure had resulted. This case was also treated with arsenic but improvement did not follow until the drug was discontinued. Two months later the leukæmic condition returned and the patient died.

Additional cases have been reported in which a symptomatic cure has apparently been effected. The interval in these cases which has elapsed between the return to approximately normal conditions and the time of publication, however, is too brief to warrant any far-going conclusions. The cases in question are those of Brown and of Bryant and Crane. In two of the three the improvement may have been referable to the X-ray treatment which was employed, but in Bryant and Crane's second case arsenic only was used. It is interesting to note that in this case there was a hæmatoma of the right ankle, which was incised on two occasions. Another case of myelogenous leukæmia has been reported by Grosh and Stone, in which, as the result of the X-ray treatment apparently, there was a marked improvement in the blood, but in which the splenomegaly did not improve. This case died rather suddenly, within a few days of the apparent recovery.

In the light of our own case and that of Plehn, it scarcely seems justifiable to refer the improvement in Senn's case to the use of the X-rays. Whether it would be admissible on the other hand to ascribe the improvement in our case and that of Plehn to the arsenic, may similarly be questioned. The treatment in Kohn's case is not very clear, but it seems that the improvement began when the arsenic was discontinued. I believe these cases merely show that the splenomegaly and myelocythemia may temporarily disappear and an improvement in the patient's general condition take place, but the rapid recurrence in Kohn's case and in McRae's, and the death of both, throws grave doubts upon the propriety of viewing such improvements in the light of a cure.

PRESIDENTIAL ADDRESS.

MEDICAL ETHICS.

By E. T. GAUDET, M. D.,

St. Joseph, N. B.

(Delivered before New Brunswick Medical Society, July 16th, 1906.)

WHILE it is my duty and pleasure to express my thanks and appreciation of the honor done me by electing me president of the New Brunswick Medical Society, I must admit that, since I have often been haunted by this unmerciful enemy of the physician—the "Presidential Address," one of the privileges of the president is to deliver the annual address, and therefore I am a victim of circumstances. In performing this agreeable duty I dismiss from my mind every apprehension of severe criticism, and I trust that if what I will say is not altogether uninteresting, at any rate I will not be long, for what I have to recommend in my address is brevity.

It has been the habit in former annual addresses to speak of the progress and recent advances in medicine and surgery, but, as it is often whispered that the physicians and surgeons of the Lower Provinces are known in the Dominion and abroad as workers and up-to-date both in surgery and medicine, I have decided to say a few words on medical ethics.

Under all circumstances the demeanor of the medical practitioner, in administering the needs of his patients, should be calm and his word tranquil. He must not be gloomy at any time, but treat the case with a smile and all the quietness of manner it will permit. The physician should ever come into the sick-room as a sunbeam, never as a thunder cloud. Again, he ought to be natural in his manner. No two are alike, and every one has his peculiarities; and for one physician to try to imitate after another is to detract from his self-reliance, and diminish his usefulness. I trust it is unnecessary for me to say to the members of the Medical Society, that it belongs exclusively to the charlatan to magnify the danger or nature of the disease he is called to treat, so that the recovery which will follow, perhaps, would follow without treatment, may seem to betoken great skill on his part. Now and again we have to endure annoyance after expressing our opinion candidly at the bedside, wishing to conceal nothing from the patient, by a member of the family in an outer room, or at the gate, or, it may be, by a neighbour on the road asking the question, "Now, what is your opinion? I will not tell anyone." But an ever repeated reply, that you have already given your opinion to the patient, will, in

time, educate the public that you do not tell two stories. The patient should know the worst as well as the best, especially when you think he is sick unto death. It is wrong to deceive, and a mistaken view that for him to learn and understand the danger, will militate against recovery. To allow one to approach the dark valley, ignorant of the terrible and solemn fact, is, in my opinion, inexcusable.

The relationship between physician and patient is one of confidence and trust. Fidelity and honour as the custodian of secrets connected with the patient are strictly to be observed. To betray such confidence, or in any way refer to him, so that even an injurious construction can be placed upon your words, is a violation of confidence. Yet at times it may be difficult to observe so manifest a rule of duty.

In seemingly hopeless cases you are required not to abandon the patient. Your attendance may continue to be highly useful to the patient and comforting to the relatives around him, even to the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. While it is your duty to candidly state your opinion when you consider the case hopeless, you must remember not merely the old adage, that "while there is life there is hope," but that in many cases the physician is mistaken in measuring the resources of the patient's constitution to resist and overcome disease, as well as the efficacy of his treatment. It is not an infrequent occurrence to have a patient seemingly stricken with a fatal malady, unexpectedy rally, perhaps for a time, perhaps to recover. It has been frequently seen that a too conscientious physician has been superseded by the assumptious charlatan, who reaped the benefit of the previous skillful treatment, in connection with the unsupposed power of nature to restore.

The patient or the guardian should select the physician, and, having done so, should not hastily or without sufficient reason dismiss or call in another. There is a class of people who are continually trying a new doctor; some on account of a constitutional love of change; some because a new doctor is recommended by Mrs. Busybody, or Mr. Dick, or Miss Interested; and some again make a change to be in fashion. Others seek a change from mercenary motives, or because they do not care to attend to a long-standing, unpaid bill. To these classes it is, perhaps, useless to speak about the ordinary principles of honour and decency. There is another class who deliberately go to a second, and perhaps a third, to obtain an opinion, concealing from each the fact that he is already a patient. This is unfair and dishonourable, as any physician may,

by the use of different terms and language, convey the idea of an opinion at variance with that of another, when in reality he holds views precisely the same. It is also reprehensible to call a physician to see a patient under the care of another, which fact is only learned when he reaches the patient; or, perhaps, he is kept in ignorance. This is a gross injustice.

The physician, old as well as young, should never object to or discourage consultations even with juniors. Consultations are desirable when life seems to be in danger, or when the case is a protracted one and does not yield to treatment. The physician may feel satisfied that he quite understands the case, and how to treat it; but he must consider the wishes of those concerned and the natural solicitude of the family. Moreover, very often it is a relief to have another to share the responsibility.

All discussion in consultation should be held secret and confidential. Neither by word nor manner should any of the parties to a consultation assert or insinuate that any part of the treatment pursued did not receive assent. The responsibility must be equally divided between the medical attendants—they must equally share the credit of success as well as the blame of failure. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause or ingratiating themselves into the favor of families or individuals.

The physician in active practice requires yearly a rest from its cares and responsibilities. In seeking recreation he has a right to ask a neighbouring brother practitioner to officiate for him. No physician will decline to render such a service. Of course, if the period of absence be prolonged, or the absentee is rather in pursuit of amusement than recreation, he should not receive from him who labours the fee earned. A physician who is thus trusted by another will not, if an honorable man, endeavor by artifice or intrigue to aleniate the patients from their regular attendant.

The instances where a physician is justified in visiting the patient of another practitioner as a friend are very rare. If urgent business or relationship make a visit nesessary, the physician will be scrupulously careful to avoid even the approach to a consideration of his disease or of the treatment being pursued.

While the physician will always consider it a pleasing duty to give professional attendance to a neighbouring confrere or his family, when asked to do so, without remuneration, he should not be requested to travel any distance or sacrifice much time without the offer of an honorarium, nor should he hesitate to accept it.

It must be said the public are not disposed to recognize the services of the medical profession, and to avail themselves of their scientific knowledge for the welfare of communities and the state. The salary for a medical health officer or fees for professional services are usually grudgingly paid. Notwithstanding the continued efforts of the profession to educate the public in sanitary laws and prevail upon legislators to enact such laws and create such organizations as will prevent sickness and prolong human life, there seems to be more or less settled indifference on their part.

Before concluding allow me to express my deep concern and the grief of the medical profession of this province caused by the death of Drs. Christie, Holden and Hand, who have laboured long and faithfully, and who have proven themselves worthy and sympathetic disciples of Æsculapius.

I thank you, gentlemen, for the kind hearing you have given me and beg you will generously aid me in the work which falls to me as your presiding officer.

BUSINESS CHANCE.

WHAT wondrous things they advertise
To do for mortal man!
They furnish artificial eyes
On the instalment plan;
They grow new hair upon your dome,
Remove it from your lip,
And give your nose that came from Rome
A perfect Grecian tip.

The mole that makes its victim shun
The low-necked evening waist
They charm away, enabling one
To show her shoulders chaste;
The bulging ears by Nature cast
From sugar-scoop designs,
When trimmed and trussed, attain at last
To purely classic lines.

They clarify the sallow skin
Until the blushes show,
Or tuck a dimple in your chin,
At rates extremely low.
Of slender figures carved from stout,
Or bandy legs made straight,
Or wrinkles wholly put to rout,
The list is adequate.

But what we really need is not
To make short people tall,
Nor cures for moth and freckle-spot
Within the reach of all.
For some smooth genius yet to come
An opening still remains:
To fill the cranial vacuum
With well-assorted brains.

FRANK ROE BATCHELDER,
In the *Smart Set.*

COCAINE.

By CHAS. M. PRATT, M. D.,
St. John, N. B.

(Read before St. John Medical Society, October 24th, 1905.)

I HAVE come to the conclusion to discuss to-night, Cocaine: where it originated; how we came to use it as we do at present, and the usages to which it is likely to be put.

Cocaine is an alkaloid of coca leaves, which drug acts though in a weaker way than does cocaine.

The coca leaves, from which we get cocaine and its salts, are peculiar to a tropical climate. The best cocaine, or that used medicinally, is derived from a species of the coca plant called "Huanuco." The shrub is from four to five feet in height, and grows only in South America, chiefly in Bolivia and Peru. There are no records whereby we can determine the time at which its cultivation was begun, but it is essentially a cultivated plant. None of the wild species of the coca plant yield our best commercial cocaine.

When this country was discovered the natives had the plant under cultivation, and they used it in the treatment of disease. The chief purposes for which it was then used were as an expectorant, sialogogue, stomachic, carminative and aphrodisiac. The leaves, which were of large size, were gathered, dried and sometimes ground, forming an ash known as llepta, and from the ash was made a pleasant tasting cordial, "pousse café." The leaves were also chewed. Taken before meals the appetite was lessened, and after meals they had a tendency to lessen the feeling of fullness from over-eating. The natives could also, with the aid of this drug, climb heights and do without oxygen for a long time. In coca leaves there is ½% to 9-10% of cocaine. At present there is official the fluid extract of coca, (dose, one-half to two fluid drachms) and the wine of coca, 15% cocaine (dose, two to four fluid drachms). Other preparations of coca, from which inferior cocaine may be derived, are from the species erythroxylaceæ, which has 170 sub-divisions, of which sub-divisions E. truxillence yields the best and most cocaine. Other alkaloids which the coca plant contains besides cocaine, are egonine and hygrine, but these are unimportant.

Cocaine is insoluble in water but very soluble in weak acids. It is through the action of hydrochloric acid that we get the salt cocaine hyrochloride, which is the salt most largely used in medicine.

Cocaine or its salts have no action upon the unbroken skin, but if applied to mucous membranes or injected subcutaneously,

it acts as a complete local anæsthetic. Tissues with which it comes into contact become pale, owing to the intense contraction of the blood vessels of the part. This contraction lasts for about two minutes and gradually gives way to a secondary dilatation. During the contraction we have complete local anæsthesia.

Cocaine, when taken by the mouth or when absorbed from local application, providing the absorption be moderate, at first causes stimulation of the cerebrum, producing more or less excitement. Afterwards the hind-brain may be affected, and convulsions produced. The spinal cord and medullary centres are also stimulated, but if the dose be large, the stimulation is succeeded by depression. Such stimulation is noticed in the respiratory and circulatory systems. Respirations are at first quickened and deepened, and on the circulation we notice increase in the force and frequency of the heart's action. As locally we get contraction of vessels, so systemically, by stimulation of vaso-motor centres, we get contraction of the whole arterial system.

On the pupil of the eye it first produces a slight contraction, followed by a dilatation—though not so great as that produced by atropine. It is a protoplasmic poison; nerve endings lose completely their activity under its influence.

Cocaine, as tested by the mouth, has a bitter taste, producing a sensation of tingling and numbness. The numbness increases for a few minutes, then slowly diminishes, and disappears in from ten to twenty minutes according to the quantity employed. First, it completely destroys the sensation of pain and taste of bitters, but does not destroy taste of sweets and acids, and action of salts is only very slightly interfered with.

From the foregoing it will be expected that cocaine has a wide range of usefulness, but like many other drugs it has its drawbacks. Owing to its rapid absorption, cocaine, when used locally, is very apt to produce a systemic effect, and following such we often have syncopal attacks with a weak and thready pulse. It is absorbed with remarkable rapidity through the air passages and from the conjunctiva.

The stimulating effects of cocaine are always followed by depression and, if used freely, by very severe depression. Nausea, vomiting, sudden loss of speech and sudden death are other untoward effects of the use of cocaine.

The nitrite of amyl is a good antidote for the severe effects of cocaine.

Cocaine is perhaps most largely used in eye operations. Dropped into the eye in a 4% strength, it is a most valuable aid to the oculist in minor operative procedures. It is also largely

employed by the laryngologist about the nose and throat, and also in dental practice. Here it is not sufficient that a solution be rubbed on the gums alone, but that the deeper tissue be penetrated. Sometimes it refuses to deaden the pain even then. Absorbed during the extraction of teeth it has been known to cause death, although this has been rarely the case. Occasionally, in larger operations, where a ligature may be applied between the seat of work and the heart, thus preventing it being taken up by the circulation, we use this drug as a local anæsthetic.

Some years ago, Schleich, of Berlin, introduced a method whereby, with repeated injections of a special solution of cocaine, he could render the tissues œdematous. This is called infiltration anæsthesia, and as the part rendered anæsthetic by the first injection is complete, other injections are made painless by keeping within the circumference of each succeeding zone of anæsthesia.

His solution is:

Cocaine hydrochloride . . .	.10
Morphine	.025
Sod. chlorid	.20
Aquam dist. ad	120.00

As internal medication, the best results have been obtained from cocaine in the persisting vomiting of pregnancy. It is also used in ordinary vomiting, in forms of dyspepsia and in gastritis.

Cocaine has been used by those addicted to the morphia habit. In some cases, while lessening the desire of morphia, it sets up the coca or cocaine habit, which is even worse than the morphia habit. Patients so addicted labour under more excitement, and as a general rule death results more quickly than is the case in morphinism.

Lessons to be learned from experiences with cocaine are as follows:

(1) Avoidance of its continual use.

(2) When given hypodermically, carefulness in injecting, preferably in a weak solution and, if necessary, gradually concentrate, and avoid promimity to vessels.

(3) Purity of drug.

(4) Judgment as to whether part is suitable for injection or not.

If the foregoing precautions are taken we still are liable to have bad after effects, but they will become very rare indeed.

The poisonous effect of cocaine occur more often when it is administered to a patient in a sitting posture, and placing the patient in a horizontal position after poisonous symptoms have set in aids greatly in the treatment of such patients. Sitting increases the the anæmia of the brain partially produced by the action of cocaine.

The latest and, if it were successful, the greatest field for the usefulness of cocaine, is in spinal cocainization. A few years

ago spinal cocanization was thought to have a great future. Wonderful results have been obtained from it, but, alas! on account of a few serious after-effects, its use has been almost entirely abandoned.

Spinal cocainization consists of the injection into the spinal cord of a cocaine solution. In a favourable case, according to the site of the needle's insertion, we get complete anæsthesia below this point. In the year 1902, I saw a large number of cases in which this method of anæsthesia was practiced. They were for major operations. That year I knew of administrations in at least twelve cases with perfect results, as far as the anæsthesic was concerned, in each case. At that time Dr. Armstrong, of Montreal, maintained that good results depended upon the purity of the solution used and its careful preparation. That used by himself was from the Pasteur Institute in Paris, and experiments with that preparation were giving widespread satisfaction while the product of other laboratories produced a great many of the bad after effects.

A case which I myself watched throughout was as follows:

Martin Costello, aged 25, laborer, born in Danville, Quebec, was admitted to Montreal General Hospital Nov. 26th, 1902.

The illness had began about six months before with severe pains in the right side which came on in attacks and which, when severe, would end in vomiting. At such time, fever and general feeling of being used up was present. Attacks came on at irregular intervals until just before entering hospital.

Condition on Admission:— Fairly robust looking adult; respiration and pulse fairly rapid; slight dyspeptic symptoms. On examination found diastolic murmur and slight evidence of aortic regurgitation. Pulse markedly collapsing; right side of abdomen rigid and tenderness near McBurney's point. Thought by Dr. Armstrong to be a suitable case for spinal cocainization.

Taken to operating theatre at 1.00 p. m. The solution of cocaine was injected with an ordinary hypodermic needle. The effect appeared almost immediately, and in about five to ten minutes the operation of appendectomy was commenced. Patient was perfectly conscious, felt no pain whatever, but sensation of touch remained. He could feel touch of instruments while work was in progress, but talked and chatted pleasantly to assistants throughout the procedure. Returned to the ward at 2.10 p. m. feeling in first class condition. He made an uninterrupted recovery without any after symptoms.

At another time a foot was amputated without any after effect but a slight stimulation and a pleasant sensation after injection.

In other places a few unfortunate results have discouraged surgeons, so that lately this method has been held in abeyance. Recently, as pointed out in the *Therapeutic Gazette* for September, Dr. Bier has experimented with stovaine, sometimes in a pure solution and sometimes in a mixture with suprarenal extract. In one hundred and two cases, he found that seven vomited, one suffered slight collapse, and in ten after-symptoms of headache and vomiting lasting two days occurred. Of the fatal cases two died with symptoms of cerebral-meningitis and showed lesious. This might have been explained by other causes.

Bier holds that cocaine spinal anæsthesia may be made comparatively safe by the addition of adrenalin, and states that he anæsthetized three hundred and five cases with not a single accident. In seventy per cent. of the patients there were slight transitory after-symptoms. By injecting in the under portion of cord the violent chills following are greatly lessened.

Stovaine, Bier thinks, is suitable for short operations in old and feeble people, on the battle field, in animal surgery, and in physiology.

Another form of anæsthetic now reported is scopolamine, which has been used in a number of cases in Philadalphia. Anæsthesia is produced by repeated injections in the arm; generally, in moderately lengthy operations, three injections at intervals of twenty minutes. A patient with carcinoma of the face was operated upon successfully in this way with no bad after-effects. The patient is completely anæsthetized.

Lessons to be Learned :—

That it is highly probable that spinal anæsthesia has a future, and that no doubt cocaine, either modified or in conjunction with some other drugs, will attain success, and that, if thoroughly tried, and its safety assured, it will prove to be far more efficacious, cheaper and more easily applied than any other anæsthetic now in use.

SOCIETY MEETINGS.

New Brunswick Medical Association.

MEETING held at Fredericton, July 2nd, called to order by the President, Dr. E. T. Gaudet, at 10 a. m. The minutes of the 25th annual meeting were read by the Secretary, and on motion a committee was appointed to report them correct and recommend them to be adopted. Doctors McNally and McInerney were appointed the Committee.

The President gave his address on "Medical Ethics."

Moved by Dr. McInerny and seconded by Dr. Purdy that the address be referred to a committee to report at a future meeting. Drs. Day, Irving and Purdy were appointed the committee.

The following bills were ordered to be paid :

The Maritime Publishing Co.....	$ 7.05
St. Croix Printing & Publishing Co.	13.11
Dr. G. A. B. Addy, printing, envelopes, postage, etc.....	15.00
Dr. L. R. Murray, postage, paper, etc	6.40

Dr. W. B. McVey read a paper on "Food Adulteration." Discussed by Drs. Irvine and Lawson, and requested that it be printed in the Maritime Medical News, also that a committee be appointed. Drs. Day, Irvine and Purdy were appointed. The following is their report :

Your committee to whom was referred Dr. McVey's paper on "Food Adulteration," beg leave to report—

That we consider the subject of vital importance to the public health, and further consider that it would be desirable that the public be acquainted with the subject, and would recommend that the paper be published in the Maritime Medical News.

Dr. A. J. Murray being ill and unable to attend the meeting, his paper on "Placenta Prævia," was read by Dr. Vanwart. It was moved and seconded that the discussion on above paper be considered later, as there was another paper on the same subject. Carried.

Dr. G. C. Vanwart read a case report on "An Abdominal Injury resulting from a Kick of a Horse." He operated and found lacerated bowel. Recovery.

Moved and seconded that the report of Council of Physicians and Surgeons be taken the first thing at afternoon session. Carried.

AFTERNOON SESSION.

The Committee on Minutes reported as follows :—

We, the committee appointed to consider the minutes of the 25th Annual Meeting, report them correct and recommend that they be adopted.

Then followed the reading and consideration of the report from

the Council of Physicians and Surgeons by Dr. S. Skinner, who also gave a financial statement of the Council.

The report was as follows :

To the President and Members of the New Brunswick Medical Society :

I have little to say regarding the affairs of the past year. The principal work has been that of routine.

At the first meeting of the Council, held on August 3rd, 1905, Dr. J. P. McInerney was elected president.

The question of the registration of graduate nurses referred to the Council by the New Brunswick Medical Society, has been carefully considered by them. The Council thought it advisable to write to Mrs. Willoughby Cummings and suggest to her the advisability of communicating with the St. John association of registered nurses with the idea of their becoming a registered body.

The following gentlemen passed the professional examinations held in December :

Dr. Wm. Dudley, Hoyt Station.

Dr. Howe A. Jones, Moncton.

Owing to the illness of one of the examiners the results of the June examinations are not completed.

At the annual meeting held in Fredericton on Feb. 19th, the following officers were elected :

DR. J. P. MCINERNEY, *President*
DR. THOS. WALKER, *Treasurer*,
DR. STEWART SKINNER,
Registrar.

The professional examiners elected were :

Dr. T. D. Walker, Chemistry, Medical Jurisprudence and Hygiene.

Dr. G. A. B. Addy, Pathology, Bacteriology.

Dr. P. R. Inches, Medicine, Clinical Medicine, Materia Medica and Therapeutics.

Dr. A. B. Atherton, Surgery and Clinical Surgery.

Dr. J. W. Daniel, Obstetrics, Diseases of Women and Children.

Dr. Stewart Skinner, Anatomy, Physiology and Histology.

G. U. Hay, A. M., Ph. B., and H. P. Bridges, A. M., Ph. D., Matriculation Examiners.

The question of Interprovincial Reciprocity remains *in statu quo.*

Respectfully submitted,

STEWART SKINNER,
Registrar.

ST. JOHN, N. B.,
July 16th, 1906.

To the President and Members of the New Brunswick Medical Society :

GENTLEMEN :—

I am instructed by the Council of Physicians and Surgeons of New Brunswick to submit for your inspection the following financial statements for the year ending Feb. 17th, 1906.

Respectfully yours,

STEWART SKINNER,
Registrar.

THOMAS WALKER, M. D., *Treasurer,*
In account with the COUNCIL OF PHYSICIANS AND SURGEONS OF N. B.

Receipts from Mar. 28th, 1905, to Feb. 17th, 1906:

Balance on hand Mar. 28th, 1905	$1,178.03
Received from Registrar, fees and dues	713.40
Received from Interest on Savings Bank deposit	27.22
Total	$1,918.65

Expenditure from Mar. 28th, 1905, to Feb. 17th, 1906:

Examiner's fees	$ 251.00
Travelling expenses	117.00
Salary of Registrar	100.00
Publishing Medical Register	69.15
Printing, advertising, stationery, etc.	49.93
Stamps, telegrams, etc	14.15
Expenses of examinations (hire of tables, cleaning, insurance)	9.15
	$ 610.38
Balance	1,308.27
Total	1,918.65

Respectfully submitted,
THOMAS WALKER, M. D.,
Treasurer.

Examined and found correct,
Feb. 19th, 1906.
(Sgd.) MURRAY MCLAREN, M. D.,
(Sgd.) P. R. INCHES, M. D.,
Auditors.

STEWART SKINNER, M. B., *Registrar,*
In account with the COUNCIL OF PHYSICIANS AND SURGEONS OF N. B.

Receipts from Mar. 28th. 1905, to Feb. 17th, 1906:

Annual Fees	$222.00
Examination fees	230.00
Registration fees	160.00
Matriculation fees	60.00
Total	$672.00

Expended from Mar. 28th, 1905, to Feb. 17th, 1906:

June 28th.	Paid	Treasurer	$200.00
July 25th.	"	"	89.00
Dec. 5th.	"	"	170.00
Feb. 16th.	"	"	213.00
Total			$672.00

Respectfully submitted,
STEWART SKINNER, M. B.
Registrar.

Examined and found correct,
(Sgd.) J. M. DEACON, M. D.
(Sgd.) E. T. GAUDET, M. D. } *Auditors.*

Moved and seconded that the report be adopted and entered on minutes in full. Carried.

DR. J. M. DEACON gave his report on Insurance Fees. Of the registered physicians, one hundred and eighty-nine have signed their names with the intention of making the insurance fee $5.00 for each examination made.

Moved and seconded that the same committee be continued. Carried.

Moved by Dr. Skinner and seconded by Dr. McNally that St. John be the next place of Annual Meeting. Carried.

Moved and seconded that the election of officers take place. Carried.

The election resulted as follows:

President—DR. S. SKINNER, St. John, N. B.

1st Vice-President—DR. J. W. BRIDGES, Fredericton.

2nd Vice-President—DR. C. G. MAIN, Edmundston.

Secretary—DR. R. G. DAY, St. John.

Corresponding-Secretary—DR. J. G. NUGENT, Briggs Corner.

Treasurer—DR. G. G. MELVIN, St. John.

Trustees—DR. J. M. DEACON, DR. PURDY and DR. J. G. MCNALLY.

Following the afternoon session, the profession of Fredericton entertained the visitors very pleasantly by taking them for a sail on the river and later providing lunch at a beautifuliy situated camp a

few miles above Fredericton. A most pleasant outing was thoroughly enjoyed by all.

Evening Session.

Paper on "Placenta Prævia complicated with Twin Pregnancy," by Dr. B. M. Mullin. Discussed by Drs. Main, Chapman, George McNally and Lawson.

Paper by Dr. W. H. Irvine, on "Chronic Salpingo-oophoritis with Multiple Adhesions; Operation and Recovery."

Paper by Dr. A. E. Butler, "Report on cases of Small Pox." Discussed by Drs. McNally, Weaver, Fisher, Mullin, Main, Deacon and Lawson.

The Treasurer's report was presented. It showed a balance on hand of $187.38. Moved and seconded that the report be adopted. Carried.

Moved and seconded that $5.00 be donated to the janitor, and a vote of thanks to the Mayor and Council for use of their room. Carried.

Moved by Dr. Mullin and seconded by Dr. Lawson that the usual honorarium of twenty-five dollars be given to the Secretary. Carried.

Moved and seconded that a vote of thanks be given to the physicians of Fredericton for the manner in which they entertained the visiting physicians, and also a vote of thanks to the press. Carried.

L. R. MURRAY,
Secretary.

CANADIAN MEDICAL ASSOCIATION.

The Thirty-ninth Annual Meeting of the Canadian Medical Asociation will be held in Toronto on the afternoon of the 20th. of August and the forenoon of the 21st. The meetings, which will be of an executive character, will be held in the New Science Building on College St., at the head of McCaul St. The first session will convene at 2 o'clock p. m., in the north lecture room. The chief item of business will be the reception of the report of the Special Committee on Re-organization, and for this alone there should be a large and representative attendance.

CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

The Fifth Annual Meeting of the Canadian Medical Protective Association will be held in Toronto, Monday afternoon, August 20th, after the first session of the Canada Medical Association, in the New Science Building on College Street at the head of McCaul Street.

The Annual Meeting of the Maritime Medical Association.

(The Fifteenth Annual Meeting was held at Charlottetown, P. E. I., July 11th and 12th.

First session opened at 10 a. m., July 11th, the President, Dr. S. R. Jenkins, in the chair. Minutes of last annual meeting were read and adopted.

Invitation read from President and Committee of Charlottetown Club, giving visiting members the use of the club.

Invitation from President and Committee of Golf Club, giving visiting members the use of their club.

A hearty address of welcome was given by Dr. F. P. Taylor, of Charlottetown, who hoped that all the visitors would enjoy their visit thoroughly.

Nominating Committee was appointed as follows: M. MacLaren, St. John, N. B.; J. V. Anglin, St. John, N. B.; T. D. Walker, St. John, N. B.; J. Stewart, Halifax, N. S.; M. A. B. Smith, Dartmouth, N. S.; J. McMillan, Pictou, N. S.; P. Conway, F. P. Taylor, H. D. Johnston, Charlottetown, P. E. I.

President's address was then read.

Dr. John Stewart moved vote of thanks to president on his address, and nominated the following committee to report on the president's address: Dr. J. V. Anglin, St. John, N. B.; Dr. Lawlor, Dartmouth, N. S.; Dr. McEwan, Summerside, P. E. I. Dr. Stewart referred to the president's allusion to athletics, and agreed that they are overdone in one respect, but not taken up enough in another, i. e., the few go in for athletics and the many look on behind the ropes. He spoke also of the necessity of setting a good example to others in matters of personal right living, self-reverence, self-knowledge, self-control, etc. Dr. Stewart also spoke of the disadvantages of our present school system, and the motion was seconded by Dr. G. G. Melvin, who also complimented the president on his address.

Dr. M. A. B. Smith spoke of the matter of teaching morals to the children, and thought it necessary for the medical profession to take this in hand, as it was not being attended to at the present time by either the lay or the religious instructors.

A well prepared and interesting paper was read by Dr. G. G. Melvin, of St. John, N. B., on the subject of "Lupus." Dr. Melvin thinks this disease should be recognized and also treated more promptly.

Remarks were made on this paper by Dr. Alex. McNeill, Summerside; Dr. M. MacLaren, St. John; Dr. F. B. Lund, Boston; Dr. T. D. Walker, St. John.

A paper was read by Dr. Alex. McNeill of Summerside, P. E. I., on "Arterio-Sclerosis." It was discussed by Dr. M. A. B. Smith, who spoke of the arterio-sclerotic form of nephritis, and quoted a case of his in this connection. He spoke of bad effect of nitroglycerine in certain cases, cyanosis being caused. The proper use of iodide of potash was referred to.

Meeting adjourned until 8 p. m., the time for the afternoon session being spent at the Prince Edward Island hospital, where cases were shown and the operation of hysterectomy performed by Dr. F. B. Lund of Boston, Mass., in a case of malignant disease of the uterus.

Evening Session, July 11th, 1906.

Meeting opened with a paper by Dr. Roderick MacNeill of Charlottetown, "Some things that everyone should know, and needed reforms in Medicine." This paper dealt with the subject of digestion.

The next paper, an admirable one, was read by Dr. J. V. Anglin, of St. John, N. B., on "Care and Commitment of the Insane," and dealt with the diagnosis of cases of insanity, and the decision as between home and institutional treatment, advantages and economy of institutional treatment, and the difficulty of treating such cases in private. There is advantage in limited use of drugs in such cases. The laws for commitment in the province of New Bruuswick are simple, and meet the requirements as well as possible.

The paper was discussed by Dr. Goodwill, of Charlottetown, who spoke of the need of correct statements and evidence from examination of the patient, and of more frequent care of the feeble-minded in the home.

Dr. Lawlor, of Dartmouth, in discussing the paper, spoke of the examination of stomach contents and the treatment of cases of acidity which are frequently found.

Dr. Lawlor also spoke of the use of veronal as a hypnotic.

Dr. M. A. B. Smith spoke also of the importance of correct data in committing insane patients.

Dr. R. MacNeill said that the insane were admitted to institutions voluntarily in Massachusetts.

Dr. Anglin thought that sulphonal is better than veronal, as it has a calming influence for thirty-six hours after its use. He thought it better not to allow the matter of determining insanity to be left to a judge, as is the case in Massachusetts.

Dr. Jardine read an interesting report of two cases of "Tubercular joints treated by Bier's method." The method was modified in a case of tubercular elbow. An Esmarch bandage being applied somewhat tightly above and below the joint, and the joint immobilized. In this case the Esmarch bandage was used for two months. In a second case, involving the metatarso-phalangeal joint of the great toe, amputation had been

advised, but by this method a cure was effected in three to four months.

Bier's methods were quoted:

(1) Ordinary bandaging, e. g., with a Martin bandage—bandage applied above the joint and not tight enough to cause pain, upper limb may be steadied by a sling. (2) Suction hyperæmia with a bell jar. The paper was discussed by Dr. Lund. He said that this method simulated the use of the poultice, and spoke of the same treatment being used in Raynand's disease. This was advocated by Dr. Harvey Cushing of Baltimore.

Dr. John Stewart said that he had used this method successfully in joint cases. He thought it made more effective the action of the lymphocytes. He mentioned a very serious case of tubercular knee joint disease cured by this method combined with the use of iodoform.

The paper by Dr. Murray MacLaren of St. John, on "Acute General Suppurative Peritonitis," was of great interest and fully discussed by Dr. F. B. Lund of Boston, who spoke of Finney's treatment by sponging of the exudation; Clarke's treatment by sewing up the abdomen and trusting to lymph channel absorption; McCosh's treatment by sponging peritoneum, and saline infusion. Dr Lund believed in the method advocated by Dr. MacLaren and uses drainage. He thinks Murphy's cases were diffuse, not general, peritonitis. He advises washing out in these cases and employs glass tube, gauze and outer layer of rubber. He also has the head of the bed raised twelve inches, to further raise head of patient. He advocates use of saline solution by rectum, as used by Murphy of Chicago.

The paper by Dr. F. B. Lund, "Surgery of Right Upper Abdominal Quadrant," was very interesting and thorough in its scope.

Dr. MacLaren said that our thanks were due to Dr. Lund for taking the trouble to come so far to our meeting. He also thought the choice of a subject was a very happy one. He emphasized the need for thorough examination of all neighbouring organs, and called attention to the importance of a pain in the back in cases of duodenal perforation.

Dr. Stewart spoke of the interest at the present time in this class of cases. He advocated, when in doubt, to operate.

A vote of thanks to Dr. Lund, was moved by Dr. T. D. Walker, and seconded by Dr. M. MacLaren and carried unanimously.

The report of Nominating Committee was then presented:

President, A. B. Atherton, Fredericton, N. B.; Vice-President for New Brunswick, T. D. Walker, St. John; Vice-President for Nova Scotia, M. A. Curry, Halifax; Vice-President for Prince Edward Island, John Sutherland, Bedeque;

Hon-Secretary, G. G. Melvin, St. John, N. B.; Hon-Treasurer, G. W. T. Farrish, Yarmouth, N. S.

Local Committee: J. R. MacIntosh, W. A. Christie, J. H. Scammell, J. V. Anglin, and W. L. Ellis. Local Secretary, G. G. Melvin.

On motion the report was adopted and above list of officers elected unanimously.

It was moved by Dr. M. A. B. Smith that the local committee be asked to arrange the different papers in groups.

Moved and seconded that the sum of five dollars be given to the janitor.

It was decided that a vote of thanks be tendered to Premier Peters and the government for use of the council chambers; to Governor and Mrs. McKinnon; to Mrs. Jenkins, and to ladies of the Golf Club, for courtesies extended.

It was moved that Drs. T. D. Walker and Melvin be an audit committee to audit the accounts and pay bills of present session.

Dr. M. A. B. Smith, of Dartmouth, presented an interesting paper on the "Treatment of Pneumonia." It was discussed by Drs. T. D. Walker, of St. John; J. McMillan, of Pictou; R. MacNeill, of Charlottetown, and R. D. McLanchlin, of St. Peters.

Dr. Smith said he found no cardiac depression followed the large doses of quinine given by him. Dr. Gallraith advocates the use of from forty to seventy grains of quinine in one dose, in conseals, according to temperature.

Dr. F. C. McGrath, of Bloomfield, P. E. I., followed with a paper on "Neurasthenia and Allied Conditions."

This was discussed by Dr. Goodwill, Charlottetown, and Dr. M. A. B. Smith, of Dartmouth. The latter emphasized the value of absolute rest in these cases.

Dr. John Stewart, Halifax, read a most interesting and useful paper on "The Diagnosis and Treatment of Ectopic Pregnancy." Colicky pain and irregular hæmorrhages, especially after a period of previous sterility, are indications of this condition.

In discussing Dr. Stewart's paper, Dr. M. A. Curry, of Halifax, said that if rupture and hæmorrhage are confined to the broad ligament, one may delay operation until patient gets a chance to recover from shock.

Dr. T. D. Walker spoke of importance of symptoms rather than statements of patients in these cases.

Dr. M. A. Curry, Halifax, read a very interesting and practical paper entitled "Ante-partum Hæmorrhage." He spoke of possibility of having condition of placenta prævia in cases of so-called accidental hæmorrhage. The history of an accident is not necessary in cases of accidental hæmorrhage. Excluding cases of placenta prævia, he advises, (*a*) in

open cases tamponing and application of abdominal binder, (*b*) in closed cases, i. e., where hæmorrhage is not external, rapid delivery.

Drs. R. McDonald, Westville, McGrath, Bloomfield, and T. D. Walker, St. John, discussd the paper.

Dr. Curry does not think that the tampon and binder injures the child in these cases.

A paper entitled "Cervical Atresia Pyometria," was read by Dr. H. E. McEwan, of O'Leary, P. E. I.

Dr. Curry thought the case to be a very interesting one. He thought it may have been due to retained menses.

Two case reports were presented by Dr. P. Conray, Charlottetown. The first was of embolism causing hemiplegia and also interruption of circulation at junction of radial and ulnar arteries, with resulting gangrene of arm.

The second was a "Fibroid of Uterus." This case was operated on by Dr. F. B. Lund, who afterwards gave the history of the case. In his remarks he said that not unfrequently we find a glassy, jelly-like appearance, indicating fibro-sarcoma. In these cases he would ampulate uterus at the cervix.

Remarks were also made by Dr. Robert McDonald, Westville, on a case of fibroids occurring in his practice.

Dr. Curry spoke of the advantage of early removal of fibroid tumors in those approaching the menopause, as there was danger of malignant transformation occurring.

A discussion on "Method to suppress the irregular practitioner," was opened by Dr. McNeill. He thought the best method was by education of the public.

Dr. M. A. B. Smith thought local societies were remiss in furnishing information to provincial boards, which would be of value in prosecuting irregular practitioners.

Dr. Stewart thinks that if laws are framed to ensure proper qualification of medical men, that they should be carried out, and when credentials are defective the practitioner should not be admitted to practice. At the present time in Nova Scotia, an injunction can be taken out against an irregular practitioner preventing his continuing in practice.

A committee was appointed to deal with this question and report next year at St. John, with the view of bringing about uniform legislation in the Maritime Provinces. No report having been received from the Treasurer, Dr. W. H. McDonald, the accounts were passed and a committee consisting of Dr. G. G. Melvin and Dr. T. D. Walker was appointed to obtain the treasurer's report and present it at the next meeting.

This committee is composed as follows: Dr. R. McNeill, Charlottetown; Dr. G. M. Campbell, Halifax; Dr. J. W. Daniel, St. John; Dr. C. P. Bissett, St. Peters, C. B.

Dr. J. McMillan moved a vote of thanks to the president and Charlottetown members of the Association for their courtesy to visitors at this meeting. The motion was seconded by Dr. M. A. B. Smith, Dartmouth, and carried unanimously.

PERSONAL PARAGRAPHS.

DR. J. A. SPONAGLE, of Middleton, was married on the 14th inst., to Miss Adelaide M. Allen of the same place. The NEWS extends its congratulations.

Dr. M. A. Macaulay has been appointed physician to the Halifax Dispensary in place of the late Dr. D. G. J. Campbell.

Dr. E. D. Farrell of this city, while on a visit to Chester, was prostrated by heat rendering him unconscious for some hours. Fortunately he has fully recovered.

Dr. S. L. Walker, of Truro, was elected Grand Master of the Grand Lodge of Odd Fellows, at the recent annual meeting at Sydney.

Dr. C. K. Clarke, medical superintendent of the Toronto Asylum for the Insane, was honoured by having conferred upon him the degree of Doctor of Laws, at the recent convocation of Queens University.

Dr. Grieve, late of Edinburgh, has arrived at St. John's accompanied by his wife, and goes to Battle Harbor, Labrador, to work with Dr. Grenfell in the hospital there.

Dr. Torrington of Greenspond, Nfld., is removing to Toronto, Canada.

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MEDICAL PRACTICE in a prosperous locality in Nova Scotia, $3,000 to $4,000 a year. Property consists of good residence and outbuildings.

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MEDICAL PRACTICE in a seaside country town, situated on line of railway. Large surrounding country with practically no competition. New residence with all modern improvements. Price and particulars on application to

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Lactopeptine Tablets

A cleanly, convenient and very palatable method of administering Lactopeptine, especially for ambulant patients.

The tart, pineapple flavor, renders these tablets as acceptable as confections. They are particularly valuable as "After Dinner Tablets," to prevent or relieve pain or distension occurring after a heavy meal.

EACH TABLET CONTAINS 5 GRAINS LACTOPEPTINE.

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Combines in a palatable form the antiseptic and anti-tubercular properties of Creosote with the nutrient and reconstructive virtues of Liquid Peptonoids. Each tablespoonful contains two minims of pure Beechwood Creosote and one minim of Guaiacol.

DOSE—One to two tablespoonfuls three to six times a day.

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SAMPLES AND LITERATURE ON APPLICATION.

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We Will Have An Exhibit At St. John and Halifax FAIRS

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Nova Scotia Carriage Co.

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KENTVILLE, N. S.

THERAPEUTIC NOTES.

CONSERVATIVE SURGERY
OR
The Use of External Applications in Cases of Doubtful Surgical Procedure.*

By F. W. Hander, M. D., Beaumont, Texas.

WITHOUT any comment on the conservatism with which a surgeon should use the knife in doubtful surgical cases as regards time, symptoms and condition of patient, I shall give you several cases which have been under my own observation.

Mrs. H., age 24, married, had suffered pain in both ovaries, especially the right, shortly before, during and for a short time after menstruation, from the beginning of her menstrual life at the age of 14. This pain gradually increased in severity and time of duration until it had become almost constant and unbearable.

After being advised by several excellent physicians to undergo operative procedure for diagnostic as well as curative purposes, she consented. When the abdomen was opened both ovaries were found to be cystic, the cysts being more numerous in the right. The appendix was normal and healthy and gave no evidence of having been in a pathological condition at any previous time. Both ovaries were removed as a curative and preventative measure.

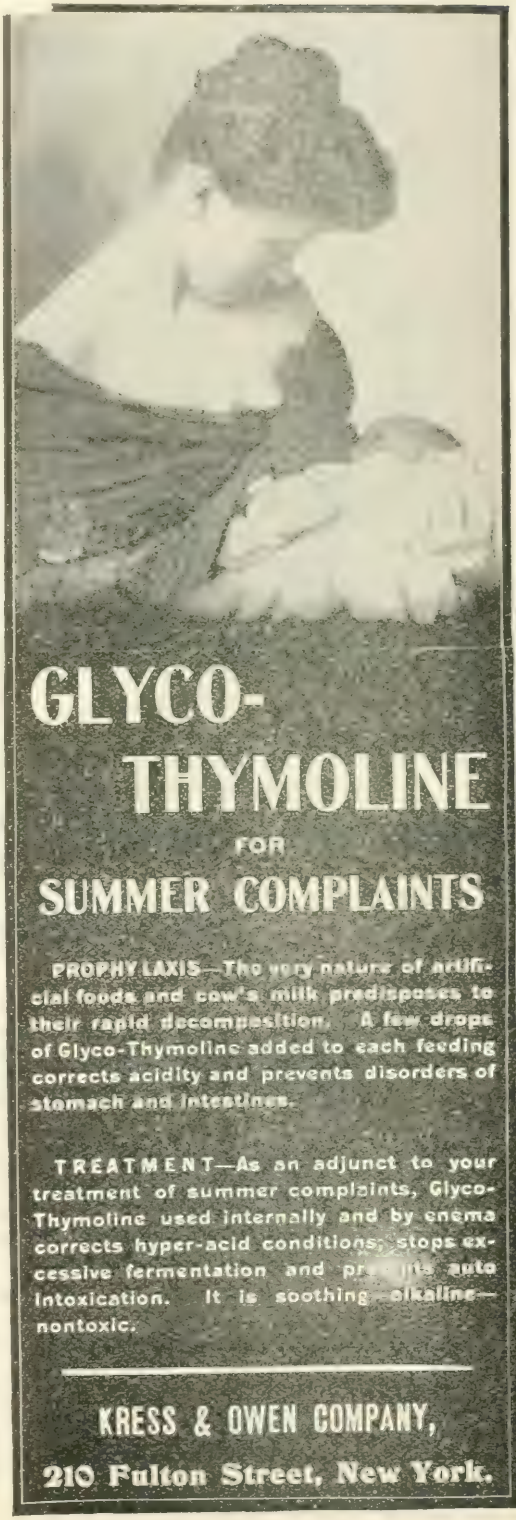
* Read before the semi-annual convention of the South Texas Medical Association, June 26, 1906, at Houston Texas.

The patient made an uneventful recovery from the operation, but for three years after, when she again sought medical advice, the pain continued as before, with the addition of slight swelling and tension in the right hypocondriac region. The patient passed through the artificial menopause with very little inconvenience or nervous disturbance.

Case 2.—Man, married, age about 27, suffering from acute attack of appendicitis, as diagnosed by the attending physician, two consulting physicians concurring. Constitutional symptoms present and anatomical appearances, such as tension, redness, swelling and pain at McBurney's point, pronounced. Operation advised, to which patient and wife objected.

In both the above cases Antiphlogistine was repeatedly applied, with the most marked benefit. In case one, although the woman had suffered three years after the operation, through the influence of Antiphlogistine, the pain and tension were modified, leaving only a small, soft elevation in the region of the appendix. Pain returned only at long intervals and with diminishing severity, and there is every indication now, after one year's treatment along this line, of permanent relief.

In case two the same treatment was carried out. Tension, redness, swelling and pain diminished with the first application of Antiphlogistine, and disappeared after ten days. With some constitutional treatment the patient entirely recovered in this time. In this case there has been no


GLYCO-
THYMOLINE
FOR
SUMMER COMPLAINTS
PROPHYLAXIS—The very nature of artificial foods and cow's milk predisposes to their rapid decomposition. A few drops of Glyco-Thymoline added to each feeding corrects acidity and prevents disorders of stomach and intestines.
TREATMENT—As an adjunct to your treatment of summer complaints, Glyco-Thymoline used internally and by enema corrects hyper-acid conditions; stops excessive fermentation and prevents auto intoxication. It is soothing—alkaline—nontoxic.
KRESS & OWEN COMPANY,
210 Fulton Street, New York.

recurrence of the attack in over three years.

I had another case in which two wire nails were driven through the palm by a falling timber. This was followed by pain and swelling after a few hours (no bleeding,) the swelling extending up the forearm.

Another case was one of a deep infected wound following paronychia. This wound was opened to the bone and free drainage established, but it gradually grew worse, involving the whole hand. Amputation of the finger or hand was advised, to which the patient objected, saying he would die first.

In both these cases the local application of phenol and Antiphlogistine gave relief and finally cure. In the latter case I cleansed the wound with hydrogen peroxide, and applied silver nitrate to the exuberent granulations.

Multiples of these minor cases could be given, where the knife seemingly was indicated, but which rapidly yielded to local applications along the above lines.

I also had an interesting case in a boy 12, years of age, who suffered from osteo-myelitis of the femur of several years' standing. The discharge was constant through a fistular opening, and the case showed no evidence of improvement, although at several operations all diseased bone and some healthy bone had been removed. Antiphlogistine dressing was persistently applied, with the result that several large particles of bone sloughed off, after which the opening rapidly closed. No further pathological process has been observed in this case in ten years, although an enlarged knee joint and some ankylosis remain as sequelæ.

ALWAYS READY

Some of the companies had a hard time in the Insurance investigation, but when the investigators came to the

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they had no difficult work to do there. The Mutual has always conducted its affairs in such a manner as to be able to submit to investigation at any moment without hesitation. Hence, the commission found the Mutual's management to be thoroughly honest, and left it without finding anything that would attach the least suspicion to it. The Mutual Life of Canada is ready for investigation all the time. :: :: :: ::

E. E. BOREHAM, - *Provincial Manager,* - **Halifax, N. S.**

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The *parturient* period is one of the most critical stages of a woman's life. In obstetrical work both prior to and following delivery

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HAS PROVEN OF INESTIMABLE SERVICE.

In Threatened Abortion it exercises a sedative effect upon the nervous system, arrests uterine contraction and hemorrhage, and prevents miscarriage.

The Rigid Os, which prolongs labor and rapidly exhausts the vitality of the patient, promptly responds to the administration of H. V. C., and no less an authority than

M. Marion Sims said

"I have prescribed Hayden's Viburnum Compound in cases of labor with *Rigid Os* with good success."

After-pains. The antispasmotic and analgesic action of H. V. C. makes it of especial service in this the third stage of labor. It modifies and relieves the distressing after-pains and by re-establishing the tonicity of the pelvic arterial system it prevents dangerous flooding

Hayden's Viburnum Compound contains no narcotic nor habit forming drugs. It has enjoyed the confidence and support of the medical profession for over a quarter of a century. Its formula has been printed thousands of times and will be cheerfully furnished with literature covering its wide range of therapeutic uses on request

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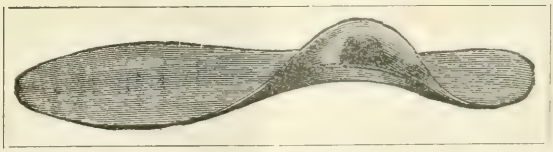

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The introduction of the improved *Instep Arch Supporter* has caused a revolution in the treatment of *Flat-foot*, obviating as it does the necessity of *taking a plaster cast of the deformed foot*.

The principal orthopedic surgeons and hospitals of England and the United States are using and endorsing these Supporters as superior to all others, owing to the vast improvement of this scientifically constructed appliance over the *heavy, rigid metallic plates* formerly used.

These Supporters are highly recommended by physicians for children who often suffer from *Flat-Foot*, and are treated for weak ankles when such is not the case, but in reality they are suffering from *Flat-foot*.

IN ORDERING SEND SIZE OF SHOE, OR TRACING OF FOOT IS THE BEST GUIDE.

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Faculty of Medicine, Seventy-Fourth Session, 1905 - 1906

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————————, Lecturer on Botany at Dalhousie College.
————————, Lecturer on Zoology at Dalhousie College.
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A. S. MACKENZIE, Ph. D.; Prof. of Physics at Dalhousie College.
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3RD YEAR.—Surgery, Medicine, Obstetrics, Medical Jurisprudence, Clinical Surgery, Clinical Medicine, Pathology, Bacteriology, Hospital, Practical Obstetrics, Therapeutics.
(Pass in Medical Jurisprudence, Pathology, Therapeutics.)

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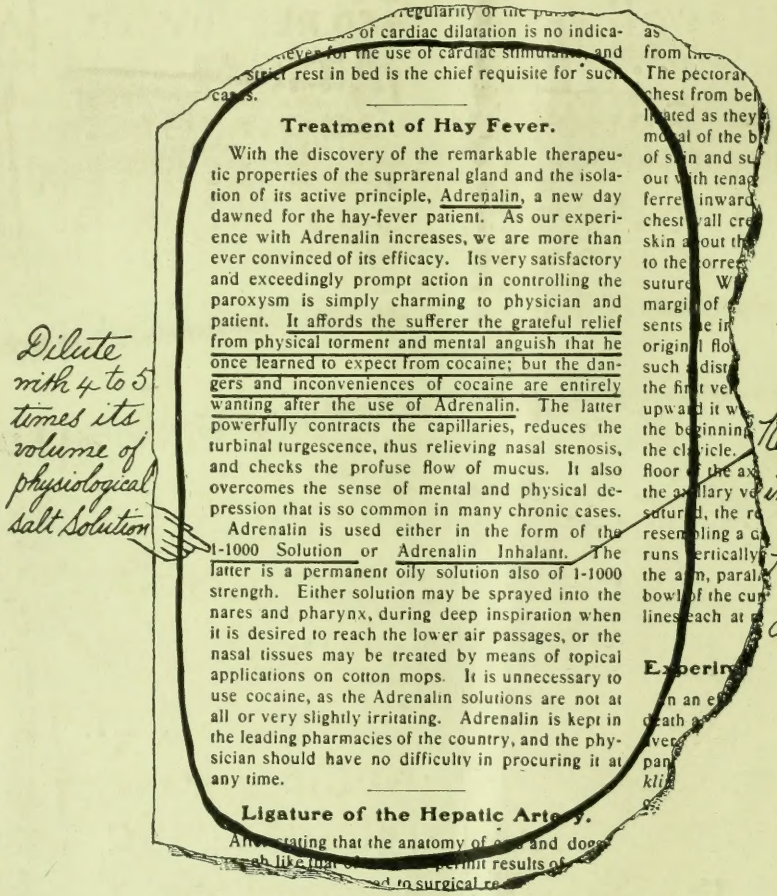

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